

REMARKS

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 are currently pending in the subject application and are presently under consideration. A version of all pending claims is presented on pages 2-7 of this Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 Under 35 U.S.C. §103(a)

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Delany *et al.* (US 2002/015679) in view of Badura *et al.* (US 2003/0139970) and McFadden (US 6,671,695). Withdrawal of this rejection is requested for at least the following reason. Delany *et al.*, Badura *et al.* and McFadden, alone or in combination, do not teach or suggest all features set forth in the subject claims.

The rationale to support a conclusion that the claim would have been obvious is that *all the claimed elements were known in the prior art* and *one skilled in the art could have combined the elements as claimed by known methods* with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1395; *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).... *If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious* to one of ordinary skill in the art. MPEP 2143.

As people move in and out of groups, and as people's contexts shift, policies concerning how such people communicate and interact can change. Associations between people are constantly changing, for example, membership in a group can change, relationships between members in a group can change, and responsibilities of

members within the group can change. Additionally, communication changes and modalities available to members of the group, for the group as a whole and/or for a subset of the group can change based on changes in association between members of the group. Typically, desired communication paths, desired communication channels, and/or desired points of contact with the group have been maintained manually via printed phone chains, printed organizational charts, and the like, and can quickly become obsolete, with the result that sub-optimal communications within and with the group can be expected and experienced.

Applicants' claimed subject matter relates generally to managing communication groups, and more particularly to creating and managing distinctions about people, their contexts and communications policies related to each other, facilitating the dynamic assignment of people to communications categories, and managing such categories to maximize the utility of communications based on category membership of the contactor, the current and/or anticipated context (situation) of the contactee, and communication channel(s) available to the communicating parties.

In accordance with one illustrative aspect, the claimed subject matter provides systems and methods for dynamically assigning entities (e.g., people, processes, computer components, etc.) to communication categories, and/or dynamically managing categories to maximize the utility of communications based on membership in such communication categories, e.g., creating and managing distinctions about people, their contexts and their tasks, wherein context can be abstracted by examining, for instance, a communication sender (contactor), the relationship the communication sender (contactor) has to a user (contactee), the time of day at which the communication sender is attempting to communicate with the user (contactee), the task(s) with which the user (contactee) and/or communication sender (contactor) are engaged, the age of the project(s) to which the user (contactee) and the communication sender (contactor) are engaged, the communication sender's (contactor's) and/or user's (contactee's) location, and so on. Thus, multiple attributes concerning, people, processes, computer components, and the like, including their preferences, contexts, tasks, and priorities can be analyzed to facilitate constructing and managing collections of people, processes, computer components, etc. Further, these multiple attributes can be employed to

facilitate establishing and adapting communication policies for people, processes, computer components, and the like, in the collections.

In a further illustrative aspect, the claimed subject matter provides a communication group manager that facilitates specifying, in terms of different groups of people, policies and preferences employed in ideal communication routing and scheduling. The communications group manager can also facilitate determination, in terms of different groups of people, how automated analysis of such idea communication routing and scheduling can be performed. Such groups of people can be defined by a user, automatically assembled based on descriptions of relationships between people, and/or automatically assembled based on a person having one or more properties that satisfy group inclusion criteria (e.g., age, location, concern about a specific subject matter). The communications group manager facilitates improving communication utility by maximizing the expected utility of a communication through actions including, but not limited to, selecting a communications channel, displaying a list of communication channels, displaying a list of communications channels sorted, for example, by the preferences of the communicating parties and/or rescheduling communications to different channels and/or times than originally selected by the communicating parties. The grouping of people into communication categories simplifies employing abstractions employed in accessing utilities of outcomes and the computation of ideal communication actions. To this end, independent claims 1 and 69 recite similar aspects, namely: *... the utility of the communication based on a cost and a benefit of the communication to a contactor and a contactee, the cost and the benefit of the communication is related to one or more preferences of the contactor and the contactee, a communication group manager that manages a group of communicating parties to facilitate optimizing the utility of the communication along a communication channel identified by the identifier, membership of the group of communicating parties based at least in part on a reciprocated communication history between entities that comprise the group, and a groupwise communication coordinator that coordinates communication between a subset of the managed group of communicating parties to facilitate maximizing the utility of the communication.* Delany *et al.*, Badura *et al.*, and McFadden, individually and/or in combination, fail to teach or suggest these aspects of applicants' claimed subject matter.

Delany *et al.* pertains to technology for modifying group membership, including self subscription or self un-subscription. A policy, associated with a group, controls user subscription to and un-subscription from a group. The policy can include at least four policies for subscribing/unsubscribing: open, open with filter, control through workflow, and closed. An open policy allows unrestricted subscription or un-subscription; open with filter requires users to satisfy a rule to subscribe, but does not require the rule to be satisfied to unsubscribe; control through workflow requires users to subscribe or unsubscribe through workflow process; and a close policy prohibits subscription to or un-subscription from the group. The Examiner contends that the cited document discloses some of the salient features of the subject claims in Figs. 3, 5, 8-10, 26, the abstract, and paragraph [0360]. (See Final Office Action dated June 4, 2008, page 3). Applicants' representative respectfully disagrees.

Fig. 3 and its associated commentary provides an architecture for supporting multiple directory servers based on the notion of abstracting database objects and separating database clients from the actual database access functionalities. Fig. 3 shows a database manager in communication with multiple profiles wherein each profile corresponds to an agent and each agent is associated with a connection manager and a data store. Further, Fig. 3 illustrates a database proxy that is created for a particular request such that when the request is completed, the proxy is terminated. The proxy communicates directly with the appropriate agents for accessing the appropriate data stores. Additionally, Fig. 5 and its commentary, as set forth in Delany *et al.*, provides a directory tree that can be stored on a directory server where each node on the tree is an entry in the directory structure that includes an identity profile such that the entry can be a user, group or organization. Figs. 8-10, and associated commentary, illustrate various services that can be accessed from a user manager, provided by a group manager, and provided by an organization manager, respectively. Moreover, Fig. 26 and commentary provided therewith, narrates a process that determine all groups to which a user is a member, including static memberships, dynamic memberships, and nested memberships. Additionally, paragraph [0360] provides that a management service opens a message channel for providing a remote request to a remote Identity Server wherein the management service issues a remote request to the remote Identity Server. However, the

foregoing figures (and associated narration) are silent with regard to *a communication group manager that manages a group of communicating parties to facilitate optimizing the utility of the communication along a communication channel identified by the identifier*, and *a groupwise communication coordinator that coordinates communication between a subset of the managed group of communicating parties to facilitate maximizing the utility of the communication*. More particularly, Delany *et al.* does not optimize the utility of communication along identified communication channels or maximize the utility of communication of the identified communication channels based on a cost and a benefit of the communication to both a contactee and a contactor such that the cost and the benefit of the communication is related to preferences attributable to the contactor and the contactee. Rather, and to reiterate, Delany *et al.* concerns itself with modifying group membership, including self subscription or self un-subscription wherein a policy, associated with a group, controls user subscription to and un-subscription from a group. The policy includes at least four “sub” policies for subscribing/unsubscribing: open, open with filter, control through workflow, and closed. An open policy allowing unrestricted subscription or un-subscription; an open with filter policy requires users to satisfy a rule to subscribe, but does not require the rule to be satisfied to unsubscribe; a control through workflow policy requires users to subscribe or unsubscribe through workflow process; and a close policy prohibits subscription to or un-subscription from the group. The policy, or more specifically utilization of the policy, does not teach, let alone suggest or contemplate, optimizing the utility of the communication along a communication channel identified by the identifier or maximizing the utility of the communication wherein the utility of communication is based on the cost and the benefit of the communication to both the contactor and the contactee.

Moreover, the Examiner acknowledges that Delany *et al.* is deficient in that it does not teach or suggest *an identifier that identifies one or more communication channels that facilitate maximizing the utility of the communication, the utility of the communication based on a cost and a benefit of the communication to a contactor and a contactee, the cost and the benefit of the communication is related to one or more preferences of the contactor and the contactee*. (See Final Office Action dated June 4,

2008, page 4). In order to remedy this omission in Delany *et al.* the Examiner provides Badura *et al.* and McFadden.

Badura *et al.* relates to a method and structure for selecting from a plurality of communication arrangements by inputting a first party's ability to communicate with a second party. The secondary document evaluates the communication arrangement based on the first party's ability to communicate and repeats the evaluating process for a different communication arrangement if the first party's ability does not match a communication arrangement previously evaluated. Badura *et al.* performs a cost-benefit analysis with respect to a communication arrangement matching the first party's ability and implements a communication arrangement when the first party's ability matches a communication arrangement. The cost-benefit shows whether the communication arrangement is justified. (See Badura *et al.*, paragraph 007) (emphasis added). However, contrary to the Examiner's assertions, Badura *et al.* does not teach or suggest *the utility of the communication based on a cost and a benefit of the communication to a contactor and a contactee, the cost and the benefit of the communication is related to one or more preferences of the contactor and the contactee*. More particularly, Badura *et al.* does not disclose identifying communication channels that maximize the utility of the communication where the utility of the communication is based on a cost and a benefit of the communication from the perspective of both a contactor and a contactee, and the cost and the benefit of the communication is related to one or more preferences of both the contactor and the contactee. Rather, the secondary document ascertains whether a communication arrangement is justified from the perspective of only one party in the communication arrangement (e.g., the first party); no consideration is made for secondary parties in the communications scheme. Thus, it is submitted Badura *et al.* does not teach or suggest the features for which it is cited.

McFadden generally relates to the generation and management of groups of individuals within a data processing environment, e.g., for use in applications such as electronic messaging, content management, security access control, and software distribution. Nevertheless, McFadden in combination with the primary and secondary documents does not cure the aforementioned deficiencies with respect to the primary and secondary documents, let alone teach or suggest the features for which the Examiner cites

the tertiary document. In particular, McFadden fails to provide *membership of the group of communicating parties based at least in part on a reciprocated communication history between entities that comprise the group*. The Examiner contends that McFadden provides these features in col. 1, lines 24-46, col. 2, lines 15-23, and col. 5, lines 11-25, applicants' representative disagrees. Col. 1, lines 24-46 narrates the fact that computer systems typically require some manner of identifying individuals to determine where to send messages to that individual, to determine whether that individual is authorized to perform certain actions, etc. Col. 2, lines 15-23 states that to manage a group within a computer environment, some form of data structure is typically required to permit the individuals, or members of that group to be readily identified. And col. 5, lines 11-25 provides that members of a dynamic group are defined based upon a group membership criterion, which may be based upon practically any set of characteristics, attributes capable of distinguishing a set of users from among a user space that meet the group membership criterion. However, none of the passages cited by the Examiner disclose, teach or suggest basing membership of a group of communicating parties on reciprocated communication histories between the entities (e.g., group members) that comprise the group.

In view of at least the foregoing, and more particularly in view of the failure of the primary, secondary, and tertiary documents to teach or suggest each and every feature recited in independent claims 1 and 69, withdrawal of this rejection with respect to the independent claims (and associated dependent claims) is requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP954US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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